Types of Matter and Mixtures Group Assessment - Check your understanding!

**True or False?** Answer these questions as a group. Check your answers when done.   
Don’t peek at the answers ahead of time! ☺

1. \_\_\_\_\_\_ Oxygen (O2) is a mixture
2. \_\_\_\_\_\_ Air is a molecule.
3. \_\_\_\_\_\_ An element is made out of only   
    one kind of atom.
4. \_\_\_\_\_\_ The atoms in a pure element   
    not bonded together.
5. \_\_\_\_\_\_ The atoms in a molecule are   
    not bonded together.
6. \_\_\_\_\_\_ When looking at drawings of a   
    molecule, the “spheres” often   
    represent molecules, & lines or   
    sticks represent the bonds   
    connecting them.
7. \_\_\_\_\_\_ A molecule could be made of

the same atoms or different

atoms that are bonded

together.

1. \_\_\_\_\_\_ Ozone (O3) is made of three   
    oxygen atoms and is a

compound.

1. \_\_\_\_\_\_ Water, salt and carbon dioxide

are all molecules.

1. \_\_\_\_\_\_ Water, salt, and carbon dioxide

are all compounds.

1. \_\_\_\_\_\_ NaCl is made out of four

different kinds of atoms.

1. \_\_\_\_\_\_ H2O2 is made up of 2 hydrogen   
    atoms and 2 oxygen atoms.
2. \_\_\_\_\_\_ Ammonia (NH3) is a compound.
3. \_\_\_\_\_\_ Bonds are formed when the   
    electrons in the outer shell are   
    shared or transferred.
4. \_\_\_\_\_\_ Atoms are the building blocks

of elements, molecules,

compounds, and mixtures.

1. \_\_\_\_\_\_ Sodium Chloride, or table salt, is

a compound.

1. \_\_\_\_\_\_ Air is a mixture of many

different gas molecules.

1. \_\_\_\_\_\_ Pizza is a heterogeneous

mixture.

1. \_\_\_\_\_\_ Salt water is a heterogeneous   
    mixture.
2. \_\_\_\_\_\_ Another word for air is oxygen.
3. \_\_\_\_\_\_ Often when you look at the   
    drawing of a compound, you

will notice that there are

different colored “spheres”

bonded together.

1. \_\_\_\_\_\_ Tap water has many things   
    dissolved in water. This means

that tap water is a

homogeneous mixture.

1. \_\_\_\_\_\_ Solutions are homogeneous   
    mixtures.
2. \_\_\_\_\_\_ Pure water (H2O) is a

compound and a molecule.

1. FALSE – Oxygen is a molecule
2. FALSE - Air is a mixture
3. TRUE
4. TRUE
5. FALSE – The atoms in a molecule are bonded together
6. FALSE – When looking at drawings of a molecule, the “spheres” often represent elements or atoms and the sticks represent the bonds connecting them.
7. TRUE
8. FALSE – Ozone (O3) is made of three oxygen atoms and is a molecule.
9. TRUE
10. TRUE
11. FALSE – NaCl is made out of two

different kinds of atoms.

1. TRUE
2. TRUE
3. TRUE
4. TRUE
5. TRUE
6. TRUE
7. TRUE
8. FALSE – Salt water is a homogeneous

mixture.

1. FALSE – Another word for O2 is

oxygen.

1. TRUE
2. TRUE
3. TRUE
4. TRUE